

**METHOD AND APPARATUS FOR REROUTING A CONNECTION IN A
DATA COMMUNICATION NETWORK BASED ON A USER
CONNECTION MONITORING FUNCTION**

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Abstract of the Invention

A method and apparatus for rerouting connections in a data communication network based on detection of faults or other undesirable characteristics using a user connection monitoring function is presented. After a connection is established that is managed by a control plane, the status of characteristics of the connection is monitored using a user connection monitoring function. In one embodiment, the user connection monitoring function includes the use of operation and management (OAM) cells. When the status of one or more of the selected characteristics being monitored is determined to be unacceptable, control plane rerouting of the connection is initiated. Selected characteristics that may be monitored using the user connection monitoring function include, for example, continuity, data corruption, data loss, latency, and misinsertion of data. The reroute initiated in response to the unacceptable characteristic may be a hard reroute or a soft reroute.